

REMARKS

Claims 30-32, 34-36, 38-40 and 43-47 are pending in this application. By this amendment, claims 34, 38 and 43 are amended and new claims 44-47 are added.

The Office Action rejects claims 30-32, 34-36, 38-40, and 43 under 35 U.S.C. §103(a) over U.S. Patent No. 5,235,615 to Omura in view of U.S. Patent 5,487,083 to Nakajima et al. (hereafter Nakajima). The rejection is respectfully traversed.

Independent claim 30 recites each of the plurality of reverse communication channels and each of the plurality of forward communication channels utilize one common frequency. Additionally, independent claim 30 recites each of the plurality of reverse communication channels having a unique code to identify the channel as a reverse communication channel and each of the plurality of forward communication channels having a unique code to identify the channel as a forward communication channel.

The Office Action (on page 3, lines 3-6) states that Omura discloses that for a particular two-way communication channel between a particular mobile and the base station, a unique chip codeword used for the base communication signal and the remote communication signal may be the same. See Omura's col. 2, lines 38-63; col. 6, lines 45-46; col. 6, lines 20-27 and col. 2, lines 42-46.

The Office Action (on page 6, lines 3-8) asserts that Omura does not specify that each reverse channel and forward channel have a unique code to identify the channels as a reverse communication channel and a forward communications channel respectively. The Office Action then states that Nakajima discloses that each communication channel is assigned two spectrum

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spreading codes which define a pair of forward and reverse channels. The Office Action cites Nakajima's col. 3, lines 63-67 and col. 4, lines 1-11. The Office Action states that it would have been obvious to have made the forward and reverse channel of Omura each separated by a unique code taught by Nakajima in order to avoid interference between adjacent radio zones and to increase the capacity.

Applicant respectfully submits that the applied references may be combined as alleged in the Office Action. Furthermore, applicant respectfully submits that the references, even if combined, do not teach or suggest all the features of independent claim 30 (as well as the other independent claims 34, 38 and 43).

More specifically, Omura relates to code division that utilizes a unique code given to each user. The Office Action modifies Omura by applying Nakajima, without any basis in the prior art, in order to show that a reverse channel and a forward channel have separate codes. However, Nakajima only discloses that a communication channel may be assigned two spectrum spreading codes to define a forward channel and a reverse channel. This teaching may not be simply modified into Omura. Omura's CDMA system does not suggest a full duplex system such as a CDD system. Additionally, Nakajima relates to a TDMA type of system. Therefore, there is no suggestion for modifying Omura's CDMA system to include additional features of Nakajima as alleged. Rather, the only suggestion to include the claimed features (and therefore to modify Omura) is provided by applicant's own specification. That is, the Office Action clearly has chosen respective features from different references and combined those references based on applicant's own teaching. Applicant respectfully submits that there is no suggestion in

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the prior art to modify Omura's CDMA system so as to include unique codes being assigned to reverse and forward channels as recited in independent claim 1. Applicant respectfully submits that the combination based on Omura and Nakajima should be withdrawn at least for this reason.

Furthermore, even if combined, the combination of Omura and Nakajima does not teach or suggest all of the features of independent claim 30. That is, the Office Action states that Omura does not specify that each reverse channel and forward channel have a unique code to identify the channels as a reverse communication channel and a forward communication channel. At best, Nakajima merely discloses that each channel is assigned two codes to define a forward and a reverse channel. However, Nakajima does not relate to a plurality of reverse communication channels and a plurality of forward communication channels that utilize one common frequency (as recited in independent claim 30) and that each of the reverse communication channels having a unique code to identify the channel as a reverse communication channel and each of the plurality of forward communication channels having a unique code to identify the channel as a forward communication channel. The fact that independent claim 30 relates to a plurality of forward and reverse channels that utilize one common frequency may not be ignored. The Office Action does not appear to take that feature into consideration when discussing features of Nakajima. Nakajima clearly does not disclose a plurality of forward communication channels and a plurality of reverse communication channels where each of the reverse communication channels has a unique code and each of the plurality

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of forward communication channels has a unique code. Nakajima only discloses two spectrum spreading codes for a channel.

Furthermore, there is no suggestion to further modify Nakajima so as to include these missing features. Rather, the only suggestion to modify Nakajima so as to include a plurality of forward channels and a plurality of reverse channels (that utilize one common frequency) is provided within applicant's own specification. That is, there is no suggestion in the prior art for these additional features that are not shown in Nakajima and/or Omura. Accordingly, independent claim 30 defines patentable subject matter at least for this reason.

Independent claim 38 defines patentable subject matter for at least similar reasons as independent claim 30.

Still further, independent claim 34 also defines patentable subject matter for at least similar reasons. That is, independent claim 34 recites that the first reverse communication channel, the second reverse communication channel, the first forward communication channel and the second forward communication channel utilize one frequency channel. Independent claim 34 also recites that the first reverse communication channel having a first unique code to identify the channel as a reverse communication channel, the second reverse communication channel having a second unique code to identify the channel as a reverse communication channel, the forward communication channel having a third unique code to identify the channel as a forward communication channel and the fourth reverse communication channel having a fourth unique code to identify the channel as a forward communication channel. For at least similar reasons as set forth above, applicant respectfully submits that Omura and Nakajima may

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not be combined as alleged. Furthermore, even if combined, Omura and Nakajima still do not teach or suggest the claimed features relating to a first unique code, a second unique code, a third unique code and a fourth unique code. At best, Nakajima only discloses two spectrum spreading codes for a channel. There is no suggestion in Omura and/or Nakajima for the claimed first through fourth unique codes. For at least these reasons, independent claim 34 defines patentable subject matter.

Independent claim 43 defines patentable subject matter for at least similar reasons as independent claim 34.

Accordingly, each of independent claims 30, 34, 38 and 43 define patentable subject matter. Each of the dependent claims depends from one of the independent claims and therefore defines patentable subject matter at least for this reason. In addition, the dependent claims recite features that further and independently distinguish over the applied references. For example, dependent claim 44 (and similarly dependent claim 45) recites that the unique code to identify the channel as a reverse communication channel is different for each of the plurality of reverse communication channels of the one frequency channel, and the unique code to identify the channel as a forward communication channel is different for each of the plurality of forward communication channels of the one frequency channel. Omura and Nakajima do not teach or suggest these features. That is, Omura discusses a unique code word for each user. Furthermore, Nakajima only discloses two spectrum spreading codes for a forward and reverse channel. Thus, the combination of Omura and Nakajima does not teach or suggest all of the features of dependent claim 44 and similarly dependent claim 45. Still further, dependent claim

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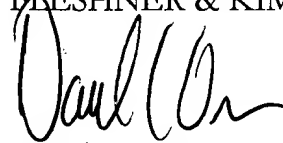
46 (and similarly dependent claim 47) recites that each of the first unique code, the second unique code, the third unique code and the fourth unique code are different. For at least the reasons stated above, Omura and Nakajima do not teach or suggest these features. Accordingly, dependent claims 44-47 define patentable subject matter at least for these additional reasons.

CONCLUSION

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance. Favorable consideration and prompt allowance of claims 30-32, 34-36, 38-40 and 43-47 are earnestly solicited. If the Examiner believes that any additional changes would place the application in better condition for allowance, the Examiner is invited to contact the undersigned attorney, **David C. Oren**, at the telephone number listed below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,
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